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Office of Air and Radiation
Office of Air Quality Planning and Standards
Innovative Strategies and Economics Group

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INFORMATION COLLECTION REQUEST FOR THE ESTABLISHMENT OF A DEFINITION OF ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT FOR THE NEW SOURCE REVIEW PROGRAM

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Executive Summary

Currently, the EPA interprets and applies its major New Source Review (NSR) exclusion for sources performing routine maintenance, repair and replacement (RMR&R) on a case-by-case basis. This rulemaking provides a formal definition of what constitutes RMR&R and describes two approaches through which sources of pollution may perform routine maintenance, repair and replacement activities without triggering major source NSR permit determinations and applications. These approaches establish a maximum cost "allowance" for exempted maintenance and repair activities; with one approach using a case-by-case basis and the other using a unit-wide aggregate cost basis.

While this analysis discusses two alternative approaches, the Agency is proposing a single RMR&R approach that combines elements of both alternatives. However, the exact nature of that combined approach has not been fully defined at this time. Consequently, the Agency had to make an important limiting assumption with regard to this analysis by assuming the two approaches are mutually exclusive and that one or the other of the approaches - but not both - will be present in the final rule. Furthermore, in considering each alternative separately, the conclusions of the analysis cannot be considered to be upper or lower bounds on the benefits or costs that may accrue to affected entities because the Agency will select the best of both alternatives when designing its hybrid program and, therefore, believes the sum will be greater than its parts, expanding benefits beyond either program individually and reducing costs below those reported for either alternative.

The activity cost test will be designed to work like the test used for New Source Performance Standards (NSPS). This new definition of RMR&R activities will exempt participating sources from costly and unnecessary major NSR determinations and permits for RMR&R-related activities and provide greater levels of certainty to industry when making permitting-related decisions. The new definition also limits the applicability of the current case-by-case determination approach for potentially major NSR actions.

Sources incur the most annual cost (about $1.3 million for all affected sources) under the proposed new RMR&R definition, but that cost is an artifact of the large number of sources affected, because sources also incur the lowest per-entity cost each year (about $900). Reviewing Authorities (RAs) will have the second lowest cost per entity ($5 thousand), and the Federal government will incur the highest cost per year at over $100 thousand. For RAs and the Federal government, these are costs in addition to those reported in the current Information Collection Request (ICR), but for sources, the reported cost is to a large (and presently unmeasurable) extent, the same burden for the same activities under the current system, with no more than perhaps five or ten percent of the total burden and cost being new. Tables E-1 displays the results of this ICR for all respondents.

This rulemaking provides opportunities for industry to improve its responsiveness to changing economic conditions while performing critical

repair, replacement and maintenance activities. These improvements derive from the RMR&R program's primary goals - the reduction of uncertainty and regulatory delay related to the performance of such activities. While valuable, the decrease in uncertainty and regulatory delay are not quantifiable in the traditional sense. Instead, the Agency's assertion that its proposed definition of RMR&R provides regulatory relief depends on a simple concept, the Le Chetalier Principle in its economic application: reducing the restrictions on industry decreases costs. Consequently, while the measurable portion of the proposed RMR&R definition displays increases in burden and cost, the program *in toto* should be beneficial.

The Agency believes that the benefits from the RMR&R program outweigh the cost of that program, whether the Agency can quantify that net benefit or not. Under this assertion, "costs" and "benefits" include economic elements other than monetary measures. Consequently, the Administrator asserts that the components of the major source permit exemption process is beneficial to sources.

Table E-1 Bottom Line Effects for All Respondents

Entity / Activity	Number of Respondents	Hours per Year per Respondent	Total Annual Hours (All Respondents)	Annual Cost per Respondent [1]	Total Annual Cost (All Respondent)[1]
Process Units (Sources)	1,450	12	17,400	$900	$1,305,000
Permitting Authorities	112	140	15,680	$5,180	$580,160
US Environmental Protection Agency	1	23	2,906	$851	$107,522
Total Expected Cost					$1,992,682

1 All costs are in 2002 dollars

1 Identification of the Information Collection

1.1 Title

This document fulfills the Agency's requirements under the Paperwork Reduction Act (PRA) with regards to determining the regulatory burden associated with the proposed change to the preconstruction permitting program to provide a clear category of activities that will be considered routine maintenance, repair, and replacement under the New Source Review (NSR) program. It has been assigned EPA tracking number 1713.04. The title of this Information Collection Request (ICR) is "Information Collection Request for the Establishment of a Definition of Routine Maintenance, Repair and Replacement for the New Source Review Program."

1.2 Description

The program commonly called the "major NSR program" derives its authority from parts C and D of Title I of the Act and is a preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants. In areas not meeting National Ambient Air Quality Standards (NAAQS) and in ozone transport regions (OTR), the program is the "nonattainment" NSR program, implemented under the requirements of part D of title I of the Act. In attainment areas (areas meeting NAAQS) or in areas where there is insufficient information to determine whether they meet the NAAQS ("unclassifiable" areas), the Agency implements the Prevention of Significant Deterioration (PSD) program under the requirements of part C of Title I of the Act. Applicability of the major NSR program must be determined in advance of construction and is pollutant-specific. When a source triggers major NSR in attainment areas, it must install Best Available Control Technology (BACT) and conduct modeling and monitoring as necessary. If the source is located in a nonattainment area, it must install technology that meets the Lowest Achievable Emission Rate (LAER), secure emission reductions to offset any increases above baseline emission levels, and perform other analysis.

The NSR program is a combination of air quality planning and air pollution control technology program requirements for new and modified stationary sources of air pollution. In brief, section 109 of the Act requires us to promulgate primary NAAQS to protect public health and secondary NAAQS to protect public welfare. Once EPA has set these standards, states must develop a State Implementation Plan (SIP) which contains emission limitations and other control measures to attain and maintain the NAAQS and to meet the other requirements of section 110(a) of the Act. The state's NSR program is a part of that SIP.

In response to comments, discussions, and recommendations from the public, and stakeholders, EPA is revising regulations governing the NSR

programs mandated by parts C and D of title I of the Clean Air Act (CAA or Act) to clarify and formalize the process through which routine maintenance, replacement, and repair of process units is handled. [1] [2]

The modification provisions of the NSR program in parts C and D are based on the definition in section 111(a)(4) of the Act:

> ". . . ['modification' means] . . . any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted."

That definition involves a two-step test for determining whether source activities constitute a modification subject to major NSR requirements: the Reviewing Authority (RA) determines whether a physical or operational change will occur and then determines whether the change will result in an emissions increase over baseline levels. [3]

The reference to "any physical change . . . or change in the method of operation" could mean that even the repair or replacement of a single leaky pipe could meet the requirements for a major NSR modification. However, the EPA has previously adopted several limited exclusions from the "physical or operational change" component of the definition to recognize that routine maintenance, repair and replacement (RMR&R), and changes in hours of operation or in the production rate are not by themselves considered a physical change or change in the method of operation within the definition of major modification. The Agency also limited the scope of the second step of the statutory definition of modification by excluding all changes that do not result in an emissions increase at a major source above a "significant" level. Taken together, these regulatory limitations restrict the application of the major NSR program to only "major modifications" at existing major stationary sources. Currently, the RMR&R exclusion is applied on a case-by-case basis, and is interpreted in a case-by-case fashion.

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1 This analysis uses the terms "process unit" and 'source" as synonyms for the same entity.

2 These provisions also let States make similar changes in their major NSR programs.

3 The term "reviewing authority" is synonymous with the term "permitting authority" used in previous permit-related analyses. The reader should consider these terms interchangeable for comparison purposes.

There has been considerable debate over the years as to the types of projects or activities that qualify as RMR&R. While EPA does not expect every source contemplating a repair and replacement activity to seek an applicability determination, the consequences of an incorrect determination by a stationary source could be an enforcement action for failure to obtain the necessary pre-construction permit. The addition of a clear category of activities considered to be RMR&R will provide more certainty to a stationary source in planning and decision making.

1.3 The Proposed RMR&R Process

EPA proposes modifying the RMR&R exemption to explicitly include activities with total costs below an annual maintenance, repair, and replacement allowance for a unit. The annual maintenance, repair, and replacement allowance and the rules for calculation and summation of projects under the allowance would be defined in new provisions at 40 CFR 51.165 (a) (1) (xxvi), 40 CFR 51.166 (b) (38), 40 CFR 52.21 (b) (39), and 40 CFR 52.24 (f) (25). Under EPA's first approach a maintenance, repair, and replacement allowance would be established for each facility for each pre-defined year (typically a calendar year or fiscal year). The costs of projects on which construction commences during the calendar year would be summed across all units regardless of the pollutant it emits from least expensive to most expensive to get a total yearly cost for a unit. Facilities with total RMR&R-related costs below the annual maintenance, repair, and replacement allowance would be considered to have undertake only routine maintenance, repair and replacement activities for those projects in its annual report. When a facility's total yearly reported cost exceeds the annual maintenance, repair, and replacement allowance, the activities would be reviewed as follows:

- The owner/operator shall subtract projects from the total yearly cost, starting with the most expensive project, until the remainder is less than or equal to the annual maintenance, repair, and replacement allowance.
- Projects that were removed from the total yearly cost would be evaluated according to the 4-step case-by-case basis in accordance with current EPA policy.
- Any removed project found to require major source NSR permitting through the *ex post* case-by-case review would be subject to the requirements of NSR, including any potential enforcement-related requirements from its failure to apply for an NSR permit before beginning the modification.

The Agency would establish the annual maintenance, repair, and replacement allowance equal to the product of the replacement cost of the unit and a specified maintenance percentage established in the proposed rule, where replacement cost is defined as the total capital investment

necessary for the complete replacement of the unit, calculated according to the EPA's cost methodology, set out in the EPA Air Pollution Control Cost Manual, (excluding the costs for installing and maintaining pollution control equipment).[4] When a stationary source uses the annual maintenance, repair, and replacement allowance to determine RMR&R activities, all projects must be included in the annual cost calculations.

Under the first approach, facilities must submit an annual report, aggregated across all units at the facility, to the appropriate Permitting Authority (RA) within 60 days of the end of the year over which project costs have been summed. Each report must provide a summary of the estimated replacement value of each unit, the aggregated annual maintenance, repair, and replacement allowance for the facility, a description of all changes made to each unit, and the costs associated with those projects. If the sum of the cost of the projects at a facility exceed the annual maintenance, repair, and replacement allowance for the unit, the outcome of the 4-step case-by-case review of all projects selected in accordance with the steps outlined above must also be included in the unit's report.

Depending on the Agency's decisions in the post-proposal stage, a possible outcome to this rule is that the current interpretation of RMR&R would be broaden, particularly if we focus on a single factor such as cost. To minimize the chances that the cost of an activity could broaden its interpretation of RMR&R activities, EPA's recommended approach will also contain safeguards to help ensure that projects that should be considered a major modification under the regulations are ineligible for exclusion from NSR under the annual maintenance, repair, and replacement allowance. EPA proposes excluding from use of the annual maintenance, repair, and replacement allowance:

1. **The installation of a new process unit.** The types of activities eligible for an automatic RMR&R exemption should be limited to maintenance of existing equipment at a stationary source in order to ensure continued safe and reliable operation. The addition of new process units that did not previously exist should receive greater scrutiny before a determination of routineness is made.
2. **The replacement of an entire process unit.** The replacement of an entire process unit should be automatically considered routine since a variety of operating parameters could change. Therefore, a wholesale exchange of a process unit should be subject to greater scrutiny under the NSR program.

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4 The EPA Air Pollution Control Cost Manual, 6th Edition, Daniel Mussatti, ed., January 2002, EPA #452-B-02-001, Section 1, Chapter 2.

3. **Any change that would result in an increase in short term emission rates of any regulated pollutant, or in the emission of any regulated pollutant not previously emitted.** Any activity that will result in a higher emission rate or the emission of a new pollutant should not be automatically excluded from the NSR program as these increases may result in a significant net emissions increase or may have a significant impact on the environment.

Concomitant with the proposed annual maintenance, repair, and replacement allowance approach, the Agency developed a second approach to the management of RMR&R activities that focuses on clarifying when the replacement of existing equipment with equipment that serves the same function and that does not alter the basic design parameters of a unit would be considered RMR&R. Under this approach, EPA would establish a percentage (yet to be determined) of the replacement value of an emissions unit (yet to be defined) as a per-project threshold for applying the RMR&R exclusion in a fashion similar to that employed for New Source Performance Standards (NSPS) purposes. This approach would let sources determine more readily what large-scale replacement activities would or would not trigger major NSR permitting. The equipment replacement approach would apply to the replacement of existing equipment with either identical new equipment or with improved, functionally equivalent equipment.

While the annual maintenance provisions described above will improve implementation of the RMR&R exclusion, the allowance applies primarily to lower cost, short turn-around activities. For large scale projects that should qualify for an RMR&R exemption, the current case-by-case approach and the proposed annual maintenance, repair, and replacement allowance approach (first approach, described above) may not provide sufficient relief. The current approach has too much uncertainty with regard to whether or not proposed projects (the same projects that would not meet the annual maintenance, repair, and replacement allowance criteria) constitute RMR&R. Affected sources must choose between proceeding without a permit (with all of the potential liabilities of noncompliance) or seeking an applicability determination, which delays major source NSR project implementation by a minimum of six months. Given such a choice, it is not surprising that the Agency has amassed anecdotal evidence there have been cases in which the uncertainty about the exemption for routine activities has resulted in expensive delays or even the cancellation of beneficial projects. Such regulatory discouragement results in lost productive capacity, as well as lost opportunities to improve energy efficiency and reduce air pollution.

Sources are not the only entities that incur undue costs from such determinations. State and local permitting authorities must devote scarce resources to make complex determinations, consult with other agencies to ensure their determinations are consistent with decisions made for similar circumstances in other jurisdictions (and the EPA), and confer with other regulators to ensure consistency among the RA's conclusions.

1.4 Analytical Considerations

While the Agency proposes a single RMR&R approach that combines elements of both alternatives, the exact nature of that combined approach cannot be determined at this time. Consequently, the Agency had to make an important limiting assumption with regard to this analysis by assuming the two approaches are mutually exclusive and that one or the other of the approaches - but not both - will be present in the final rule. Furthermore, in considering each alternative separately, the conclusions of the analysis cannot be considered to be upper or lower bounds on the benefits or costs that may accrue to affected entities because the Agency will select the best of both alternatives when designing its hybrid program and, therefore, believes the sum will be greater than its parts, expanding benefits beyond either program individually and reducing costs below those reported for either alternative.

The results of the EPA's analysis are found below.

2 Need and Use of the Collection

2.1 Need / Authority for the Collection

Title I of the Act requires EPA to collect this information. Through the NSR program it requires owners or operators of units that emit air pollutants to submit an application for a permit to construct, modify, or significantly alter the operations of each source of criteria pollutants.

2.2 Practical Utility / Users of the Data

For EPA to carry out its required oversight function of reviewing preconstruction permits and assuring adequate implementation of the program, it must have available to it information on proposed construction and modifications. The burden estimates included in this ICR provide emissions, source, and control information for the PSD/NSR and nonattainment NSR program.

2.3 Caveats and Considerations

The analysis included in this ICR is based upon the best data available to the Agency at this time. However, inconsistencies in RA reporting techniques, incomplete data sets, and sampling limitations imposed upon the Agency by the Paperwork Reduction Act necessitated a certain amount of extrapolation and "best-guess" estimations by RAs and Agency experts. Consequently, the reader should not consider the conclusions to be an exact representation of the level of burden or cost that will occur. Instead, this ICR should be considered a directionally correct assessment of the impact the programmatic changes included in this rulemaking.

Throughout this ICR, the reader will observe estimated values that show accuracy to the single hour or dollar. However, reporting values at the single unit level can be misleading. In most situations, the proper way to present estimated data would be to determine an appropriate level of precision and truncate values accordingly, usually in terms of thousands or millions of units. For instance, a spreadsheet generated estimation of $5,456,295 could be presented in the text as $5.5 (millions) or $5,456 (thousands). One problem with such an approach is the loss of data richness when the report contains a mixture of very large and very small numbers. Such was the case with this ICR, where source values are consistently in the millions and Federal values in the tens of thousands. Consequently, to avoid the loss of information through rounding, this ICR reports all values at the single unit level and reminds the reader that there is no implied precision inherent in this style of reporting.

3 Non-Duplication, Consultation, and Other Collection Criteria

3.1 Non-Duplication

For approval of a proposed ICR, the Agency must ensure it has taken every reasonable step to avoid duplication in its paperwork requirements in accordance with 5 CFR 1320.9. The Administrator asserts that the data collected for this rulemaking is more specific than other, similar, collections and constitutes a necessary component of the NSR program.

3.2 Public Notice Requirements

The ICR for 40 CFR Parts 51 and 52 was renewed in February of 2001. This analysis presents an update to that renewal, based upon programmatic changes completed since February, 2001. For all of the elements of this rulemaking, significant public comment periods were given.

3.3 Consultations

Discussing improvements to the NSR program included interagency consultation, including meetings with representatives from the Department of Energy, the Department of the Interior, and the Office of Management and Budget. EPA also held conference calls with various stakeholders during October 2001, including representatives from industry, state and local governments, and environmental groups. During these meetings, EPA discussed definitions for routine maintenance, repair and replacement in order to create more certainty for the regulated community. Today's proposed rule is an outgrowth of ideas discussed in those meetings.

3.4 Less Frequent Collection

The Act defines the rate of reporting by sources, states, and local entities. Consequently, less frequent collection is not possible.

3.5 General Guidelines

OMB's general guidelines for information collections must be adhered to by all Federal Agencies for approval of any rulemaking's collection methodology. In accordance with the requirements of 5 CFR 1320.5, the Agency believes:

1. The NSR regulations do not require periodic reporting more frequently that semi-annually
2. The NSR regulations do not require respondents to participate in any statistical survey.
3. Written responses to Agency inquiries are not required to be submitted in less than thirty days.
4. Special consideration has been given in the design of the NSR program to ensure that the requirements are, to the greatest extent possible, the same for Federal requirements and those RAs who already have preconstruction permitting programs in place.
5. Confidential, proprietary, and trade secret information necessary for the completeness of the respondent's permit are protected from

disclosure under the requirements of §503(e) and §114(c) of the Act.

6. The NSR regulations do not require more that one original and two copies of the permit application, update, or revision to be submitted to the Agency.
7. Respondents do not receive remuneration for the preparation of reports required by the Act or parts 51 or 52.
8. To the greatest extent possible, the Agency has taken advantage of automated methods of reporting.
9. The Agency believes the impact of NSR regulations on small entities to be insignificant and not disproportionate.

The record keeping and reporting requirements contained in the current NSR program and the changes made in this rulemaking do not exceed any of the Paperwork Reduction Act guidelines contained in 5 CFR 1320.5, except for the guideline which limits retention of records by respondents to three years. The Act requires both respondents and State or local agencies to retain records for a period of five years. The justification for this exception is found in 28 U.S.C. 2462, which specifies five years as the general statute of limitations for Federal claims in response to violations by regulated entities. The decision in U.S. v. Conoco, Inc., No. 83-1916-E (W.D. Okla., January 23, 1984) found that the five year general statute of limitations applied to the Clean Air Act.

3.6 Confidentiality

Confidentiality is not an issue for this rulemaking. In accordance with the Clean Air Act Amendments of 1990, the monitoring information to be submitted by sources as a part of their permit application and update; applications for revisions and renewals is a matter of public record. To the extent that the information required is proprietary, confidential, or of a nature that could impair the ability of the source to maintain its market position, that information is collected and handled subject to the requirements of §503(e) and §114(c) of the Act. Information received and identified by owners or operators as confidential business information (CBI) and approved as CBI by EPA, in accordance with Title 40, Chapter 1, Part 2, Subpart B, shall be maintained appropriately (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 39999, September 8, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

3.7 Sensitive Questions

The consideration of sensitive questions, (i.e., sexual, religious, personal or other private matters), is not applicable to this rulemaking. The information gathered for NSR applications does not include personal data on any owner or operator.

4 The Respondents and the Information Requested

4.1 Respondents

The Agency asserts the benefits from the RMR&R program outweigh its costs, including other economic elements other than monetary measures, whether the Agency can quantify that net benefit or not. Consequently, the Administrator asserts the RMR&R program must be beneficial to sources.

This rulemaking pertains to the process for the reporting of physical changes at a pollution source that may be classified as routine maintenance, repair, and replacement. In the past, facilities screened maintenance and repair activities at a process unit according to a case-by-case rule for determining whether the activity could trigger major NSR. The facility would apply for an NSR determination for all activities it believed may trigger major NSR permitting and those activities for which a case-by-case test was inconclusive. Based upon the results of this determination, the facility would respond accordingly, applying for a major NSR permit when necessary. Under the proposed definition of the RMR&R program, EPA has developed an objective test to reduce the uncertainty associated with determining whether a source is eligible for routine maintenance exclusion and streamlined the major source permit determination process to remove uncertainty and decrease regulatory delays. EPA anticipates sources will almost unanimously choose to participate in the new RMR&R program because of the increased regulatory certainty and decreased burden and delay offered by the program.

There are approximately 14,500 sources of air pollution potentially subject to NSR permitting, representing all industry classifications in 34 states and the District of Columbia.[5,6] This comprises the majority of the universe of potentially affected sources for the NSR program and for this ICR. Table 4-1 in the current ICR displays the industry classifications

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5 The database does not include AK, AR, AZ, ID, KS, KY, MT, NJ, NM, PA, SD, TN, TX, UT, WA, and WY. While several of these states contain many sources subject to NSR, EPA believes the lack of their information in this database does not harm this analysis.

6 Most sources contain more than one pollution creating unit, but this report does not need to differentiate by pollutant for the purposes of this analysis.

most commonly affected by NSR permitting requirements[7]. Table 4.1, below, reproduces that table for this analysis.

Table 4.1 Potentially Affected Entities

Industry Group	SIC	NAICS
Pulp and Paper Mills	261	32211, 322121, 322122, 32213
Paper Mills	262	322121, 322122
Chemical Processes	281	325181, 32512, 325131, 325182, 211112, 325998, 331311, 325188
Pharmaceuticals	283	325411, 325412, 325413, 325414
Petroleum Refining	291	32411
Automobile Manufacturing	371	336111, 336112, 336712, 336211, 336992, 336322, 336312, 33633, 33634, 33635, 336399, 336212, 336213
Electric Services	491	221111, 221112, 221113, 221119, 221121, 221122
Natural Gas Transport	492	48621, 22121

Potentially affected sources for this ICR update includes only sources in attainment areas in Federally controlled States, (Hawaii, Illinois, Indiana, Michigan, North Dakota, Nevada, New Hampshire, New Jersey, New York, Ohio, and South Dakota), other Federally controlled areas, and 95 sources in Indian country.

Until the next NSR Update in 2004 most states will not be affected by this regulation due to the regulatory lag needed for SIP review, revision, and approval. Until then the only sources affected by this rulemaking will be located in attainment areas in states and other areas where the Federal government has direct regulatory authority. For those states with Federal delegation not in the Operating Permits database, the Agency used "proxy" data to represent them. To identify an appropriate proxy state, the Agency employed the same methodology it used when estimating the universe of states with Federal delegation in the ICR update for NSR applicability issues. The Agency estimated the Federally controlled state source count to be about one third of the total number of sources in the Operating Permits Database - about the same as the ratio of Federally controlled states to the number of states in the database. Since this ICR revision deals exclusively with sources in attainment areas, and since PSD permit applications constitute about one-third of all NSR permit applications annually, after establishing proxies for the missing states, the EPA estimated about 10 percent (1,450 sources) of all of the sources in the Operating Permits Database will be in areas affected by this rulemaking and will participate in the RMR&R program.

In accordance with the methodology employed for other permit-related ICRs, we determined there are 112 RAs affected by this rulemaking.

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7 Information Collection Request for 40 CFR Part 51 and 52 Prevention of Significant Deterioration and Nonattainment New Source Review, Office of Management and Budget (OMB) Control Number 2060-0003; EPA Form Number 1230.09.

4.2 Information Requested

The data required by sources for a complete preconstruction permit for NSR or PSD purposes are in the various parts of Title 40 of the Code of Federal Regulations (40 CFR) and reported in other NSR ICRs. These requirements constitute the burden that would be avoided by a source using the RMR&R exemption; and the burden that would be imposed upon sources using the RMR&R exemption but exceed their cost threshold.

4.3 Collection Schedule

Under the current NSR system, respondents are not subjected to a collection schedule per se under NSR permitting regulations of parts 51 and 52. However, the provisions of the annual maintenance, repair, and replacement allowance alternative add an annual burden to all sources subject to and potentially subject to PSD and nonattainment NSR application requirements. Within 60 days of the end of a facility's reporting year, the facility must produce and submit a report for each process unit's annual maintenance, repair, and replacement activities, including the replacement value (current purchase and installation cost of a similar device) of each process unit, a description of all changes made to the unit (including the cost of those changes), and, if the total cost of those changes exceed the processing unit's annual maintenance, repair, and replacement allowance, the determination of each nonroutine activity's case-by-case NSR determination. There is no analogous reporting process for the equipment replacement approach.

4.4 Small Entity Flexibility

The Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement and Fairness Act (SBREFA) requires regulatory agencies, upon regulatory action, to assess that actions potential impact on small entities (businesses, governments, and small non-governmental organizations) and report the results of the assessments in (1) an Initial Regulatory Flexibility Analysis (IRFA), (2) a Final Regulatory Flexibility Analysis (FRFA), or (3) a Certification. For ICR approval, the Agency must demonstrate that it "has taken all practicable steps to develop separate and simplified requirements for small businesses and other small entities" (5 CFR 1320.6(h)). In addition, the agencies must assure through various mechanisms that small entities are given an opportunity to participate in the rulemaking process.

A Regulatory Flexibility Act Screening Analysis (RFASA) developed as part of a 1994 draft Regulatory Impact Analysis (RIA) and incorporated into the September 1995 ICR renewal analysis showed that the changes to the NSR program due to the 1990 Clean Air Act amendments would not

have an adverse impact on small entities.[8] This analysis encompassed the entire universe of applicable major sources that were likely to also be small-business - approximately 50 "small business" major sources[9]. Because the administrative burden of the NSR program is the primary source of the NSR program's regulatory costs, the analysis estimated a negligible "cost to sales" (regulatory cost divided by the business category mean revenue) ratio for this source group. Currently, there is no economic basis for a different conclusion at this time.

4.4.1 Measures to Avert Impacts on Small Entities

The Agency may not, as a general rule, exempt a major source of air pollution. Since the impacts of NSR regulations which may impact small entities are predominantly to major sources, little room exists for regulatory flexibility to avert the impact of the proposed rulemaking on small entities through exemption. However, even though the NSR program does not have an adverse impact on a significant number of small businesses, EPA takes measures to assist sources in affected small entities through the implementation of small business stationary source technical and environmental compliance assistance programs, as called for in section 507 of the Act. These programs can reduce the reporting burden of small entities which are subject to major NSR and may significantly alleviate the economic burden on small sources by establishing programs to assist small businesses with determining what Act requirements apply to their sources and when they apply, and guidance on alternative control technology and pollution prevention for small businesses.

4.4.2 Measures to Mitigate Impacts on Small Entities

Generally, EPA has several methods by which it can minimize the disproportionate effect of a rulemaking on small entities. Net costs an be reduced through the use of small business stationary source technical and environmental compliance assistance programs, the Agency can defer applicability for one or several source categories, and mitigation can be achieved by discretion of the Federal government. However, these avenues do not apply to the NSR program.

4.5 Environmental Justice Considerations

The President's priorities in promoting environmental justice are contained in Executive Order #12898. By the nature of the tasks included in this rulemaking, it is not likely there will be any disproportionate environmental justice effects derived from this part of the NSR program.

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8 "Economic Assessment of the Impacts of Part C and D Regulatory Changes," June 2, 1994.

9 The definition for "small business" employed for all SIC categories in this analysis was any business employing fewer than 500 employees.

5 The Information Collected - Baseline, Methodology, and Management

5.1 Determination of Baseline

Tables 6-1, 2, and 3 of the current ICR for the PSD/NSR program (as revised by recent applicability provisions) lists the activities, burden, and costs of the NSR activities required under 40 CFR parts 51 and 52 for sources, RAs, and the Federal government, respectively. For convenience, Tables 5.1, 2, and 3, below, recreate this information for PSD sources (those sources potentially affected during the scope of this ICR revision. These estimates form the baseline for this ICR.

Table 5.1 Baseline Annual Source Burden and Cost[a] Estimates

Activity	Units	Hours per Unit	Annual Hours	Annual Cost
I. Part C (PSD)				
A. Preparation and Planning				
Determination of Compliance Requirements	320	170	54,400	$4,080
Obtain guidance on Data Needs	320	120	38,400	$2,880
Preparation of BACT Engineering Analysis	320	85	27,200	$2,040
B. Data Collection and Analysis				
Air Quality Modeling	320	200	64,000	$4,800
Determination of Impact on Air Quality Related Values	320	100	32,000	$2,400
Post-construction Air Quality Monitoring	320	50	16,000	$1,200
C. Permit Application				
Preparation and Submittal of Permit Application	320	50	16,000	$1,200
Public Hearings	320	24	7,680	$576
Revisions to Permit	320	40	12,800	$960
D. Subtotal burden		839	268,480	$20,136
E. Direct cost for Pre-construction Air Quality Monitoring	34			$7,099
F. Total cost				$27,235

a In thousands of 2000 dollars

Table 5.2 Baseline Annual State and Local RA Burden and Cost[a]

Activity	Units	Hours Per Unit	Annual Hours	Annual Cost
I. PART C (PSD)				
A. Attend Pre-application Meetings	320	36	11,520	$428
B. Answer Respondent Questions	320	20	6,400	$238
C. Log In and Review Data Submissions	320	16	5,120	$190
D. Request Additional Information	320	8	2,560	$95
E. Analyze for and Provide Confidentiality Protection	320	24	7,680	$285
F. Prepare Completed Applications for Processing	320	32	10,240	$380
G. File and Transmit Copies	320	8	2,560	$95
H. Prepare Preliminary Determination	320	24	7,680	$285
I. Prepare Notices for and Attend Public Hearings	320	40	12,800	$475
J. Application Approval	320	40	12,800	$475
K. Notification of Applicant of RA Determination	320	8	2,560	$95
L. Submittal of Information on BACT / LAER to RBLC	320	16	5,120	$190
M. Total		272	87,040	$3,231

a In thousands of 2000 dollars

Table 5.3 Baseline Annual Federal Burden and Cost[a]

Activity	Units	Hours Per Unit	Annual Hours	Annual Cost
I. PART C (PSD)				
A. Review and Verify Applicability Determination	320	2	640	$24
B. Review Control Technology Determination	320	3	960	$36
C. Evaluate Air Quality Monitoring	320	4	1,280	$48
D. Evaluate Alternative and Secondary Impact Analysis	320	2	640	$24
E. Evaluate Class I Area Analysis	320	2	640	$24
F. Administrative Tasks	320	1	320	$12
G. Total		14	4,480	$166

a In thousands of 2000 dollars.

5.2 Burden Statement

This section discusses the development of burden estimates and their conversion into costs, which are separated into burden costs and capital and O&M costs. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. The Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

5.3 Cost Statement

According to the latest guidance for ICRs (EPA 1995), capital and O&M costs report the cost of any new capital equipment the source or RA may have to purchase solely for the purpose of information collection, assimilation, and storage. For example, if a source had to purchase a new mini-computer to store and manipulate data, that computer would be a cost of administration subject to reporting in the ICR. For this ICR revision, the Agency believes all the information needed for the inventory assessment activities at each process unit area readily available and do not require additional capital investment for their handling. Furthermore, the Agency believes all of the data required for the determination of the replacement value of each process unit are readily available through accounting activities currently undertaken by each facility (e.g., through insurance documentation).

The latest guidance also instructs the Agency to differentiate the burden associated with a source's labor and that which it hires through outside contractors. For this ICR revision, the Agency believes the activities required for a source to participate in the RMR&R program are proprietary activities that preclude the recruiting of consultants and contractors to perform them. Therefore, all of the source respondent activities reported in this ICR revision are calculated as administration-level tasks.

5.4 Data Collection Methodology

Under the current NSR system, each facility submits information for a case-by-case determination of whether a maintenance activity will trigger the need for an NSR application. Under the RMR&R system in this proposal, each activity deemed to be outside the RMR&R exemption must undergo the same determination process. However, the set of determinations expected to result from this rulemaking is a subset of the set of determinations currently made. Therefore, the proposed RMR&R definition constitutes a reduction in burden for sources and RAs, relative to the *status quo*.

The Agency believes all activities that will trigger a major NSR determination and application under the proposed RMR&R program are the same activities that would have triggered a major NSR application under the current system. Consequently, for this ICR revision, the burden associated with NSR-triggering maintenance activities is the same for sources and RAs under the current and proposed programs.

6 Estimating the Burden and Cost of the Collection

6.1 Estimating The Respondent Burden

This section presents estimates of the burden hours and cost expected to be incurred by respondents (sources, RAs, and the EPA) during the scope of this ICR revision, applying the methodology established for economic analyses established by the Agency in The OAQPS Economic Resource Document [10] and The EPA Air Pollution Control Cost Manual. The burden estimates reflect the expert judgement of EPA staff, contractors, and industry experts. All burden estimates represent the marginal cost of this rulemaking, based upon the baseline burden and costs described in the NSR program's February 14, 2001 ICR renewal. [11]

The change in burden due to this rulemaking will eventually apply to all sources in attainment and nonattainment areas. However, for several years following the promulgation of this rulemaking, the Agency anticipates only the following entities may be affected by this rulemaking:

- Federal EPA offices: including Regional Offices and The Office of Air and Radiation, The Office of Air Quality Planning and Standards, the Air Quality Standards and Strategies Division, and the Information Transfer and Integration Division
- All Reviewing Authorities,
- Federally controlled areas such as outer continental shelf drilling platforms, and Tribal lands and Federal territories and holdings (e.g., American Samoa),
- Sources of air pollution within attainment areas within states that have Federal authority,
- Federally managed areas, and
- Tribal lands.

6.2 Estimating Source Burden

The first task environmental managers must undertake at each facility is to read and assimilate the information contained in this rulemaking and then to develop a strategy and accounting system for complying with it. This is a one-time activity and, according to the direction of the Office of Management and Budget, has been averaged over the three-year life of a typical ICR. The Agency believes that, on average, it should take a facility

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10 United States Environmental Protection Agency, The OAQPS Economic Resource Document, http://www.epa.gov/ttn/ecas/econdata/6807-305.pdf, April 1999

11 United States Environmental Protection Agency, February 14, 2002, Information Collection Request for 40 CFR part 51 and 52 Prevention of Significant Deterioration and Nonattainment New Source Review, OMB Control No. 2060-0003, EPA No. 1230.09

no more than ten or twelve hours to perform this task and has allocated 4 hours per year to this activity in this analysis.

Under the first approach, the first annual task at each facility applying for an RMR&R exemption is to estimate the replacement costs of all of its process units. This assessment must be done initially and each year thereafter, at the end of the facility's reporting year. EPA believes that it will take no more than 4 hours per process unit (source) for each facility determine the replacement cost of that process unit affected by a routine maintenance provision, including inquiries of financial officials and maintenance personnel within that facility or its owning firm. Generally, the initial burden and costs for an activity exceed the cost of repeating the activity in subsequent years. However, the Agency believes the relative ease of collection of the data necessary for the RMR&R program precludes any economies of scale or savings through learning-by-doing. Therefore, the annual long-term burden for data collection for each process unit (source) in the RMR&R program will also be 4 hours.

Following the estimation of replacement cost for each process unit, the facility must create an annual report for each source, detailing all of the RMR&R-related activities at that unit and their costs. For some units, this may be a relatively short report, but for many process units in highly competitive industries, it may take as much as a full person-day to compile and assimilate all of the information on many RMR&R-related actions taken throughout the year. On average, EPA believes it will take no more than 4 hours per report to gather and record each unit's RMR&R-related activities into the facility's annual report.

According to the methodology established in the preamble, if the total value of RMR&R activities in the annual report from a source exceeds the limit established for a particular unit, the most expensive of those activities must be reviewed under the current 4-step case-by-case process to determine whether or not they qualify as major source NSR activities. If an activity qualifies under the 4-step test as a major source NSR permit activity, the source must immediately apply for that major source NSR permit and may incur some enforcement related costs due to *ex post* application for the activity. In these cases, the Agency believes there will be no net increase or decrease in burden to the source, since the activities are the same as their analog in the base case, but there may be a slight increase in costs.

The Agency has identified one potential cost savings to sources that cannot be quantified at this time. Under the current system, sources must wait until an NSR application has been approved before it can commence construction, modification, or maintenance activities. Under the proposed system, that regulatory lag has been removed by allowing for NSR permits

to be applied for after the fact. While mitigated somewhat by the potential for enforcement actions, the Agency believes *ex post* permit applications are potentially significant in impact. EPA does not have data upon which to base any numeric conclusion and invites the public to comment on the potential scope of this element of the RMR&R program. Table 6.1 displays the expected annual burden and cost of this rulemaking to sources for the three years immediately following promulgation (the maximum scope of this ICR revision).

Table 6.1 Expected Yearly Marginal Burden and Cost to Process Units (Sources)

Entity / Activity	Respondents	Hours Per Respondent per Year	Total Annual Hours (All Respondents)	Annual Cost per Respondent [1]	Total Annual Cost (All Respondent)[1]
Sources					
Rule Assimilation, Development of Strategy[2]	1,450	4	5,800	$300	$435,000
Assessment of Replacement Value	1,450	4	5,800	$300	$435,000
Preparation of Annual RMR&R Report	1,450	4	5,800	$300	$435,000
Total Source Burden and Cost	1,450	12	17,400	$900	$1,305,000

1 All costs are in 2002 dollars
2 One-time items have been averaged over the three year life of this ICR.

6.3 Estimating RA Burden

Review authorities seeking to implement the new RMR&R provisions will incur the costs outlined in this section. RAs, however, do not have to adopt any particular provision as long as they can show that their version of the program is at least as stringent as the EPA's. RAs who do not want to implement the new provisions will incur costs associated with demonstrating the adequacy of their existing programs. While participating RAs will not have to directly manage RMR&R programs during the scope of this ICR revision, each participating RA will have to begin the process of understanding the rule and incorporating it into its SIP. In addition, many states must have SIP approval from their legislature and all participating RAs will face some sort of public comment period on their revised SIPs. The EPA believes the assessment for these activities represented in other rulemaking ICRs are representative of the burden that this rulemaking will impose. Consequently, the Agency applied the burden estimates from recent title V-related ICRs to this rulemaking.

The Agency identified five tasks that each RA must perform for the incorporation of the RMR&R program into its SIP. First, each RA must spend (on average across all RAs) about 60 hours in rule familiarization activities, after which it will expend about 30 hours in determining the criteria for applicability of the rule to each of the sources within its purview. The next step involves SIP revision, which the Agency believes

will take about 120 hours. Once the RA has revised its SIP, it must first take public comment, revise the SIP based upon those comments, and then guide the new SIP through the legislative process. Public hearings and SIP modification should take, on average, about 90 hours, based on the fact that public hearing requirements vary significantly between states. Legislative coordination will also vary across states, but on average, the Agency believes will take no more than 90 hours per RA. Table 6.3 displays the expected annual burden and cost of this rulemaking to RAs for the three years immediately following promulgation (the maximum scope of this ICR revision). Table 6.3, below, also displays the expected number of source, RA, and Federal respondents for the period of time immediately following promulgation, and their expected annual burden and cost. [12]

Table 6.2 Expected Marginal Burden and Cost to Reviewing Authorities

Entity / Activity	Respondents	Hours Per Respondent per Year	Total Annual Hours (All Respondents)	Annual Cost per Respondent [1]	Total Annual Cost (All Respondent)[1]
Permitting Authorities					
Rule Familiarization[2]	112	20	2,240	$740	$82,880
Applicability Determinations[2]	112	10	1,120	$370	$41,440
SIP Revision[2]	112	40	4,480	$1,480	$165,760
Public Hearing and SIP Modification[2]	112	30	3,360	$1,110	$124,320
Legislative Coordination[2]	112	40	4,480	$1,480	$165,760
Total Permitting Authority Burden and Cost[1]	112	140	15,680	$5,180	$580,160

1 All costs are in 2002 dollars
2 One-time items have been averaged over the three year life of this ICR.

6.4 Estimating Federal Burden

The Federal government incurs a significant short-run burden from the promulgation of this rule, but the Agency believes the burden and cost of the RMR&R program after the SIP approval process has been completed will decline to minimal levels. During the first three years following promulgation (the maximum scope of this ICR revision), the Agency will be responsible for three primary activities. First, in support of each of the 112 RAs working to revise their SIPs to include RMR&R the Agency can be expected to offer at least 10 hours of guidance per year, or 3,360 hours over the scope of this ICR. Furthermore, as each RA completes its SIP, ERA will have to review and approve it. This process should take about

12 Tables 6.2 and 6.3 deal exclusively with the burden and cost of the proposed RMR&R definition during the first three years following promulgation of the rule. Consequently, neither table includes the review of annual reports (an element of this rulemaking's associated Impact Analysis paper).

one day per SIP, or a total of 896 hours (266 hours per year average). Finally, the EPA must administer the RMR&R program to those sources where it has authority. EPA believes the review and approval of each RMR&R report will take about 10 hours per year, or 1,450 hours per year for all process units (sources) and 4,350 hours over the three-year maximum life of this ICR revision. Table 6.4, below, displays the average annual expected burden and cost to the Federal government for the RMR&R program.

Table 6.3 Expected Federal Yearly Marginal Burden and Cost

Entity / Activity	Number of Respondents Served	Hours per Year per Respondent	Total Annual Hours (All Respondents)	Annual Cost per Respondent [1]	Total Annual Cost (All Respondent) [1]
US Environmental Protection Agency					
Coordination with RAs [2]	112	10	1,120	$370	$41,440
Review of SIPS [2]	112	3	336	$111	$12,432
Management of Federal Program	145	10	1,450	$370	$53,650
		23	2,906	$851	$107,522

1 All costs are in 2002 dollars
2 One-time items have been averaged over the three year life of this ICR.

6.5 Estimating Respondent Costs

The ICR-related cost to respondents are the annual burden cost of personnel and the capital cost of collection-related equipment. Since all of the elements of this rulemaking constitute opportunities for reductions in source burden, there will be no potential change in the capital costs associated with this ICR update. Consequently, all of the costs in this ICR update are related to the change in administrative burden each element of this rulemaking provides.

6.5.1 Source Costs

Source burden costs are typically wage rates paid to employees and costs incurred by the use of consultant labor. However, for this analysis, the Agency assessed source burden as only wages for employees within the affected firms. The current ICR displays the standard derivation for source wage rates employed in many air-related ICRs, in accordance with guidance established by the Agency's Office of General Council (OGC) for its initial Federal Operating Permits Regulatory Impact Analysis (RIA) and ICR. [13] For this analysis, the Agency assessed source burden as only internally generated wages, established at the administrative (white-collar)

13 United States Environmental Protection Agency, May, 1995 , Part 71 Information Collection Request.

rate of $75 per hour (fully loaded) as established in the August 2001 ICR for the Compliance Assurance Monitoring Rule (EPA Number 1663.03).

6.5.2 Estimating Agency and RA Costs

During the development of the 1997 ICR for the part 71 Federal Operating Permit Regulations, the Agency established the methodology by which it estimates the appropriate wage rates to apply to Federal burden categories. For this ICR, the Agency employed the same methodology to determine 2002 Federal and state burden costs and established the appropriate rate at $37 per hour. The Agency has asserted for each ICR performed in support of the Air Office's permitting function that the wage for state agencies and other RAs is the same as the wage for the Federal government. The current ICR also displays the derivation of these wages, as well

6.6 Expected Benefits

For those activities that trigger NSR under the RMR&R program, the Agency believes those same activities would have triggered major NSR applications, anyway. Consequently, the savings to sources participating in the RMR&R program will derive from smaller maintenance and repair activities that would have triggered a major NSR application but were not identified as not RMR&R activities through this program's ranking process. An additional savings to participating sources can be found in the avoidance of requests for determination for all activities that did not pass the case-by-case test under the current approach. However, while this rulemaking will potentially produce a savings in burden for sources of air pollution, EPA does not have the necessary data to estimate the level of that savings. Consequently, EPA invites the public to provide comments on the extent to which sources are able to avoid major NSR determination requests and major NSR permitting because of the RMR&R program.

6.7 Conclusions

For the three years following promulgation of this rulemaking, the Agency expects the RMR&R program will generate costs of about $2 million per year, of which process units will accrue about 65 percent. While sources have the most annual cost, the large number of affected units means sources will actually incur the lowest per-entity cost each year. RAs will have the second lowest cost per entity ($5 thousand per RA), and the Federal government will incur the highest cost per year at over $100 thousand. For RAs and the Federal government, these are new costs, in addition to those reported in the current ICR, but for sources, the reported cost is to a large (and presently unmeasurable) extent, duplicative of the burden for the same activities under the current system. While the extent of the new source burden of this rulemaking is unknown, the Agency has asserted that no more than perhaps five or ten percent of the total burden and cost will be new. Table 6.5, below, displays the results of this ICR for all respondents.

Table 6.5 Bottom Line Effects

Entity / Activity	Number of Respondents	Hours per Year per Respondent	Total Annual Hours (All Respondents)	Annual Cost per Respondent [1]	Total Annual Cost (All Respondent)[1]
Process Units (Sources) Annual Maintenance, Repair, and Replacement Allowance Approach	1,450	12	17,400	$900	$1,305,000
Permitting Authorities (Both Approaches)	112	140	15,680	$5,180	$580,160
US Environmental Protection Agency (Both Approaches)	1	23	2,906	$851	$107,522
Total Expected Cost (Annual Maintenance, Repair, and Replacement Allowance Approach)					$1,992,682

1 All costs are in 2002 dollars

6.6 Reasons For Change In Burden

Through years of negotiation, public meetings, and draft revisions, the Information Transfer and Program Integration Division has strived to streamline and simplify the reporting and record keeping requirements for the preconstruction permit proceed mandated by the Clean Air Act for sources of criteria and hazardous air pollutants. This rulemaking represents the culmination of many parts of that process. Because the goal of this effort was to reduce burden and costs, the reasons for the change in burden displayed above in Tables 6.3, 6.4, 6.5 and 6.6 is self evident.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (2137), 401 M St. S.W., Washington D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, N.W., Washington D.C. 20503, Attention: Desk Officer for EPA. Include the EPA ICR number and OMB control number in any correspondence.